

AMENDMENTS

In the Claims

1. (Original) A method for scheduling work and delivery of material for mass-
~~producing items in a factory comprising:~~
obtaining at least one outstanding customer order, wherein each outstanding customer of the at
least one outstanding customer order includes an item ordered by a customer, and
producing the item requires a required quantity of a required material;
determining a current state of an available inventory of at least one material from a plurality of
material sources; and
periodically generating a work schedule and a material delivery schedule for producing the item
using the at least one outstanding customer order and the current state of the available
inventory, wherein
the determining the current state of the available inventory is performed such that the
determining the current state of the available inventory is completed immediately
prior to the generating the work schedule and the material delivery schedule; and
the obtaining the at least one outstanding customer order is performed such that the
obtaining the customer order is completed immediately prior to the generating the
work schedule and the material delivery schedule.
2. (Original) The method of claim 1 wherein
the at least one outstanding customer order and the current state of the available inventory are
posted continuously for the generating the work schedule and the material delivery
schedule.
3. (Original) The method of claim 1 wherein
the at least one outstanding customer order and the current state of the available inventory are
posted continuously to an automated data warehouse.

4. (Original) The method of claim 1 wherein the determining the current state of the available inventory includes determining for each material of the at least one material of the available inventory:

a material source of the plurality of material sources from which the material can be obtained,

wherein the material source is updated continuously;

an available quantity of the available material at the material source, wherein the available

quantity is updated continuously; and

an availability time of the available quantity of the material at the material source to each

operation of at least one operation of each manufacturing line of at least one

manufacturing line of the factory, wherein the availability time is updated continuously.

5. (Original) The method of claim 1 wherein

the obtaining the at least one outstanding customer order includes using a status for each

customer order of at least one customer order, wherein the status for each customer order

is updated continuously; and

the status for each outstanding customer order corresponds to an outstanding status.

6. (Original) The method of claim 1 wherein

the available inventory comprises external inventory.

7. (Original) The method of claim 1 wherein

the available inventory comprises work-in-progress inventory.

8. (Original) The method of claim 1 wherein

the available inventory comprises in-transit inventory.

9. (Original) The method of claim 1 wherein

the available inventory comprises in-house inventory.

10. (Original) The method of claim 1 wherein

the periodically generating the work schedule and the material schedule includes generating the

work schedule and the material delivery schedule every two hours.

11. (Original) The method of claim 1 wherein

a manufacturing shift comprises a number of hours less than or equal to eight; and
the periodically generating the work schedule and the material schedule includes generating the
work schedule and the material delivery schedule a plurality of times during the
manufacturing shift.

12. (Original) The method of claim 1 wherein
the plurality of material sources comprises an external material source, the external material
source providing an external inventory of a first material of the at least one material of
the available inventory; and
the determining the available inventory of the material includes using an external
visibility interface module to determine the available inventory of the first
material in the external inventory.

13. Cancelled

14. Cancelled

15. Cancelled

16. Cancelled

17. Cancelled

18. Cancelled